

STATUS: Effective

POLICY NUMBER: WASTE-0061-NPD

SUBJECT: "Contained-in Determination" Policy

AUTHORIZED: Bruce Palin – Assistant Commissioner

SUPERSEDES: WASTE-0052

ISSUING OFFICE(S): Office of Land Quality

ORIGINALLY EFFECTIVE: October 17, 2002

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Disclaimer: This Nonrule Policy Document (NPD) is being established by the Indiana Department of Environmental Management (IDEM) consistent with its authority under [IC 13-14-1-11.5](#). It is intended solely to provide guidance and shall be used in conjunction with applicable rules or laws. It does not replace applicable rules and laws, and if it conflicts with these rules or laws, the rules or laws shall control. Pursuant to [IC 13-14-1-11.5](#), this policy will be available for public inspection for at least 45 days prior to presentation to the appropriate State Environmental Board, and may be put into effect by IDEM 30 days afterward. If the nonrule policy is presented to more than one board, it will be effective 30 days after presentation to the last. IDEM also will submit the policy to the Indiana Register for publication.

1.0 PURPOSE

This guidance is intended to clarify the application of Resource Conservation and Recovery Act (RCRA) hazardous waste regulations to environmental media (i.e., soil and groundwater). Environmental media that has become mixed with "listed" hazardous wastes must be managed as hazardous waste when generated (e.g., exhumed for discard during remedial activities) because it contains "listed" hazardous waste(s). Federal hazardous waste rules 40 CFR 260 through 40 CFR 270 are adopted by reference in [329 IAC 3.1](#) including the listing and characteristics of hazardous waste. Listed hazardous waste refers to solid wastes that have been determined to be hazardous waste by the U.S. EPA based upon the specific process generating the waste or the specific source of the waste. Listed hazardous wastes are further described in 40 CFR 261 Subpart D as adopted by [329 IAC 3.1](#). Mixtures of listed hazardous waste and nonhazardous solid waste are considered to be RCRA hazardous waste per 40 CFR 261.3(a)(2)(iv). Characteristic hazardous waste refers to solid wastes that exhibit a "hazardous waste characteristic", such as "ignitability", "corrosivity", "reactivity", and/or "toxicity" as defined in 40 CFR 261 Subpart C as adopted by [329 IAC 3.1](#).

United States Environmental Protection Agency (U.S. EPA) regions and authorized states, including Indiana, may use site-specific, media-specific, and contaminant-specific health-based criteria to determine when listed hazardous waste is not "contained-in" environmental media. If the concentration of the hazardous constituents in the environmental media fall below the specified health-based levels, the environmental media may be determined to no longer contain hazardous waste. Such a "contained-in determination" may be made by an authorized state before or after treatment of the contaminated environmental media and may include consideration of site-specific exposure pathways (e.g., potential for human exposure, soil permeability, leaching potential to groundwater). It should be noted that any treatment of hazardous waste may require a permit. For further information on this issue, see the IDEM guidance document Treatment of Hazardous Waste On-site by Generators at <http://www.in.gov/idem/5026.htm>, or contact staff of the RCRA permit or compliance programs at IDEM.

Level of contaminants of concern found in Table A-6, Screening Level Summary Table, of Appendix A, Screening Levels, of the Remediation Closure Guide (RCG), represent an appropriate basis for making a risk-based "contained-in determination" for soil and groundwater. Screening levels in Table A-6 were generated using conservative models and default assumptions concerning exposure and site conditions. If applicable, the environmental media must also meet all Land Disposal Restriction (LDR) treatment standards (including treatment of underlying hazardous constituents as defined at 40 CFR §268.2(i) for material that exhibits a characteristic in addition to containing a listed waste).

2.0 SCOPE

The scope of this NPD applies to environmental media (soil and groundwater) which is not characteristically hazardous but is subject to RCRA regulation by containing listed hazardous waste at concentrations below specific RCG screening levels.

Excavated nonhazardous soil, which is not subject to this policy, may be subject to solid waste regulations in [329 IAC 10](#) and/or policies as applicable.

This NPD is not meant to address naturally occurring contaminants of concern in soil or groundwater.

3.0 SUMMARY

The U.S. EPA "Contained-in Policy" states that soil and/or groundwater, which do not contain "listed" RCRA hazardous waste, and which is not otherwise hazardous, is not subject to RCRA regulation. A determination as to whether "listed" waste is "contained-in" soil and/or groundwater may be made by authorized states based on whether constituents from "listed" waste(s) are below health-based levels. Contamination levels specified in Appendix A – Table A-6 of the Remediation Closure Guidance system developed by IDEM represent appropriate health-based levels for determining if soil or groundwater contains "listed" hazardous waste. This NPD explains how the screening levels in the Remediation Closure Guide will be used to make determinations on whether constituents from listed hazardous wastes are contained-in soil or groundwater.

This NPD is applicable to soil and/or groundwater that is generated and subsequently managed and does not replace or alter requirements for closure or clean-up requirements found in various regulatory authorities.

This NPD is applicable for soil which will be managed:

- Off-site as a solid waste in a permitted disposal facility (e.g., municipal solid waste landfill),
- Groundwater that is solidified and managed off-site as a solid waste in a permitted disposal facility (e.g., municipal solid waste landfill), and
- Groundwater that is managed in a unit subject to Clean Water Act.

Consistent with U.S. EPA policy, a written "contained-in" determination must be obtained from IDEM.

4.0 DEFINITIONS

4.1. "Agency" – The Indiana Department of Environmental Management (IDEM).

4.2. "Characteristic hazardous waste" – A solid waste as defined in 40 CFR 261.2, which is not excluded from regulation under 40 CFR 261.4(b), is a hazardous waste if it exhibits any of the following characteristics as defined by 40 CFR 261 Subpart C as adopted in [329 IAC 3.1](#):

- A. Ignitability
- B. Corrosivity
- C. Reactivity
- D. Toxicity

4.3. "Contained-in determination" – Written determination granted by U.S. EPA or an authorized state that certifies an environmental media (soil or groundwater) is no longer considered a hazardous waste.

4.4. "Contaminant of concern" (COC) – Chemicals that are included in the hazardous waste "Industry and U.S. EPA hazardous waste number" sections listed in 40 CFR Subpart D. The contaminants of concern will consist and correlate to the listed hazardous waste identified as impacting the environmental media in the "contained-in" determination request.

4.5. "Environmental media" – Naturally occurring soil and groundwater.

4.6. "Hazardous waste" – Hazardous waste as defined in 40 CFR 261 Subpart B.

4.7. "Listed hazardous waste" – A solid waste as defined in 40 CFR 261.2, which is not excluded from regulation under 40 CFR 261.4(b), which is included in the lists in 40 CFR 261 Subpart D, and which has not been excluded under 40 CFR 260.20 and 40 CFR 260.22 as adopted in [329 IAC 3.1](#).

4.8. "Nonrule policy document" – The term assigned by the Indiana Department of Environmental Management (IDEM) to those policies identified in [IC 13-14-1-11.5](#) as any policy that: A. Interprets, supplements, or implements a statute or rule; B. Has not been adopted in compliance with [IC 4-22-2](#); C. Is not intended by IDEM to have the effect of law; and D. Does not apply solely to the internal IDEM organization (is not an Administrative Policy).

4.9. "Remediation Closure Guide" – An IDEM NPD describing selected approaches to investigation and

risk-based closure of contaminated or potentially contaminated sites. Its purpose is to provide for consistent application of [IC 13-12-3-2](#) and [IC 13-25-5-8.5](#), which form the statutory basis for risk-based cleanup in Indiana.

4.10. "Resource Conservation and Recovery Act (RCRA)" – Refers to the federal Resource Conservation and Recovery Act as codified in 40 CFR and means the version of 40 CFR adopted in to the Indiana Administrative Code in [329 IAC 3.1](#).

4.11. "Screening levels" – Levels of hazardous substances and petroleum calculated by the department using standard equations and default values for particular hazardous substances or petroleum. (IDEM Remediation Closure Guide Appendix A)

4.12. "Soil" – Unconsolidated earth material composing the superficial geologic strata (material overlying bedrock), consisting of clay, silt, sand, or gravel as classified by the U.S. Natural Resources Conservation Service.

4.13. "Solid waste" as defined in 40 CFR 261.2

5.0 ROLES

5.1. The Site Owner/Consultant/Operator or whomever requests a "contained-in" determination shall:

- Be responsible for conducting a waste determination/characterization of the environmental media, specific to the "contained-in" determination.
- Delineate areas to be removed as part of remediation removal and provide the volumes of material to be managed under this policy. Amounts of environmental media generated as investigation derived wastes (IDW) should be included in the "contained-in" request.
- Sample and analyze the environmental media to determine if it has been impacted with listed hazardous wastes and/or if the environmental media exhibits hazardous waste characteristics. This will require collecting and analyzing representative samples of the environmental media in accordance with SW846 or other accepted methods and standards.
- Identify the hazardous waste listing codes to be considered for the "contained-in" determination.
- Identify any hazardous waste characteristics exhibited in the environmental media considered for the "contained-in" determination.
- Determine the concentration of the contaminants of concern in the environmental media and how those levels compare to the screening levels contained in the RCG.
- Submit a request for the environmental media to be exempted from being a hazardous waste through the "contained-in" determination process. At a minimum, the request should include the following:
 - A cover letter indicating the proposed "contained-in" request.
 - A completed "Contained-in Checklist" (Included in Appendix 1).
 - Laboratory analytical results. Analytical data submitted to IDEM in support of a "contained-in" determination should include the items listed for Full QA/QC in Section 3.9, Table 3-A of the Remediation Closure Guide.
 - Map(s) indicating sample locations and points of generation.
- Maintain records/documentation used as a basis for determining the concentration of the contaminants of concern in the environmental media.
- Provide IDEM with the intended location of disposal of the environmental media identified in the "contained-in" determination.
- Maintain records of where the "contained-in" environmental media was sent off-site.
- Contact IDEM if the facility wishes to pursue a case-by-case exemption and for information on the development of a site-specific risk analysis to establish exit levels.

5.2. IDEM Technical Environmental Specialist E7 shall:

- Review contained-in determination request.
- Determine if data provided supports the approval of a contained-in request.
- Generate a letter responding to the "contained-in" request. That letter could be any one of the following:
 - Request for additional information.
 - Approval of the contained-in determination request.
 - Denial of the contained-in determination request.
- Route the letter to the branch chief for approval and signature.

5.3. IDEM branch chief shall:

- Receive and route "contained-in" requests to the E7.

- Review the letters and sign as appropriate.
- Route the signed letters to the branch administrative assistant for mailing and entry into the IDEM Virtual File Cabinet (VFC) electronic file system.

6.0 POLICY

6.1. Use of Commercial/Industrial Screening Levels

The "Direct" Commercial/Industrial screening levels in Table A-6 may be used as the basis for a "contained-in" determination when:

- The environmental media is not characteristically hazardous,
- All applicable LDR requirements are met, and
- The soil will be disposed at a permitted disposal facility (e.g., municipal solid waste landfill).

Groundwater, solidified for disposal, which then meets the "Direct" Commercial/Industrial screening levels in Table A-6 for soil may be disposed at a permitted facility (RCRA Subtitle C or Subtitle D landfill cell).

The Remediation Closure Guide does not contain Commercial/Industrial screening levels for groundwater. It has been determined that the Residential Groundwater Closure Level increased by a factor of ten (x10) may be used as the Commercial/Industrial groundwater "exit" level for groundwater that is managed in any unit subject to federal Clean Water Act.

6.2. Determination Approval

In order to be approved for a "contained-in" determination, indicating that an environmental media no longer contains hazardous waste and is not subject to RCRA regulatory management requirements, the environmental media must meet the following requirements:

- (1) Be below contaminant of concern (COC) concentration levels in Table A-6, Commercial/Industrial Levels of the RCG,
- (2) Not exhibit a hazardous characteristic,
- (3) Meet U.S. EPA Land Disposal Restriction (LDR) requirements, if applicable, including alternative standards established for contaminated soils (40 CFR 268.49), and
- (4) Be disposed of in a permitted disposal facility (e.g., municipal solid waste landfill).

Due to the complexity of establishing the appropriate "exit level" from RCRA regulations, and the need to be consistent with U.S. EPA policy, any facility that intends to demonstrate that environmental media no longer contains a listed hazardous waste must obtain a written "contained-in" determination approval from IDEM.

If the environmental media is deemed to meet the aforementioned criteria, the agency will notify the requesting entity of a "contained-in" determination approval. The approvals are based on either set amounts of environmental media to be disposed during a short duration one-time approval or for repeatedly generated investigation derived wastes that will be generated over a set period of time. Any ongoing approval would be based on the future generated environmental media meeting the required contained-in criteria specified above.

All approvals for a one-time generation of a "contained-in" waste will expire one calendar year after issuance.

All approvals for reoccurring investigative derived "contained-in" wastes will expire two calendar years after the date of issuance and will require a resubmittal for consideration of continued approval at the completion of the two-year period. Screening levels at the time of the renewal/resubmittal will be used when evaluating the "contained-in" determination for renewal.

6.3. Other Options

On a case by case basis, facilities may develop site-specific risk analysis to establish non-default exit levels. If a case-by-case site-specific risk analysis is requested by the owner/operator, a written request will need to be submitted to the agency and a written approval will be required.

Please contact the staff of the Hazardous and Industrial Waste Compliance Program, Office of Land Quality, at 317-234-6923 for additional information on case-by-case approvals.

7.0 REFERENCES

7.1. Indiana Administrative Codes:

- A. [329 IAC 3.1](#), Hazardous Waste Management Permit Program and Related Hazardous Waste Management
- B. [329 IAC 10](#), Solid Waste Disposal Facilities

7.2. Indiana Statutes:

- A. [IC 13](#)

7.3. Agency Policies:

- A. Remediation Closure Guide NPD (Waste-0046-R1)
- B. Contained-In Determination NPD (Waste-0052)

7.4 U.S. EPA Contained-in Policy:

This document is 56 pages long and rather than it being included in this document, it is referenced by website address.

<http://www.epa.gov/osw/hazard/correctiveaction/resources/guidance/remwaste/refrnecs/12cntdin.pdf>

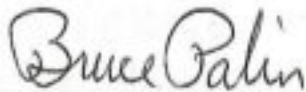
8.0 SIGNATURES



Thomas W. Easterly, Commissioner
Indiana Department of Environmental Management

12/24/2014

Date



Bruce Palin, Assistant Commissioner
Office of Land Quality

3/14/14

Date



Carol Comer, Assistant Commissioner
Office of Legal Counsel and Criminal Investigations

4/8/2014

Date

This policy is consistent with agency requirements.



Quality Improvement Program
Office of Planning and Assessment
Indiana Department of Environmental Management

12-29-2014

Date

Appendix 1

Information Checklist for Contained-In Request

1. Name of responsible party (property owner/operator).
2. Site description (Name, Address, Size of Site, and Number of Areas Involved). Please provide any site ID# such as EPA ID#, VRP number, etc.
3. Is the site subject to RCRA corrective action, enforcement orders?
4. Is the site being remediated under state or federal oversight? Identify Agency and Agency contacts.
5. How was the site contaminated? (Spill of hazardous waste, product release, process waste release, other?)
6. When was the site contaminated?
7. What EPA waste codes apply and why? Indicate all listed and characteristics codes applicable to the material which contaminated the site.
8. Does the environmental media exhibit any characteristics of hazardous waste, in addition to being contaminated with a listed waste? If it does, the environmental media would be subject to hazardous waste rules regardless of listed waste concentration. Environmental media cannot exit the hazardous waste system unless treated to remove the hazardous waste characteristics.
9. Which specific hazardous substances/constituents are present based on analytical results? Be sure to include all the breakdown products of the listed waste.
10. What is the volume/quantity of environmental media involved? An estimate of the volume/quantity will provide some idea of what size project is being addressed.
11. Will the environmental media in question be generated one time only, as a batch or in a continuous manner?
12. Is treatment of the environmental media involved or necessary?
13. Analytical sample results from the laboratory conducting the analysis and the test methods used to analyze the environmental media. Results must be based upon representative sampling.
14. A description of the sampling plan and methods used to assure representative sampling.
15. QA/QC documentation should be provided. Analytical data submitted to IDEM in support of a "contained-in" determination should include the items listed for Full QA/QC in Section 3.9, Table 3-A of the Remediation Closure Guide.
16. How will the environmental media be managed at the generation site, intermediate sites, and final destination? What time periods are involved?
17. What is the final destination of the environmental media and how is it to be managed at the final destination site?
18. How will the company assure contained-in threshold levels are attained for environmental media that will be generated on an ongoing basis?

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